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ORCHID MERICLONES FOUND INFECTED WITH CYMBIDIUM MOSAIC VIRUS

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Meristem progagation of orchids was originally developed in France to eliminate Cymbidium mosaic virus from infected plants (2). Orchid plants developed in this manner are referred to as mericlones. This technique is also being used for the rapid reproduction of "awarded" and other valuable orchid plants.

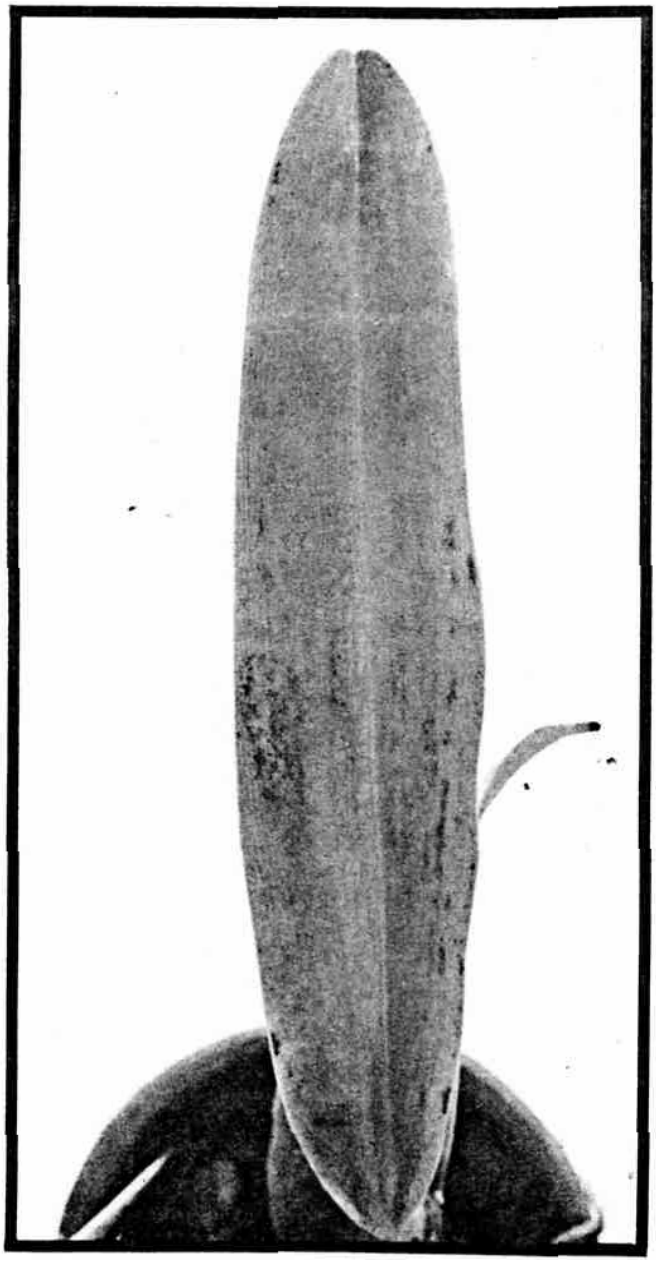

Fig. 1. Leaf symptoms of Cymbidium mosaic virus on mericlones of Cattleya-type orchids.

Recent studies by the Division of Plant Industry and other workers (1) have shown that this process of vegetative reproduction does not always result in virus-free mericlones of Cattleya-type orchids. Some of the mericlones originally imported from France gave a positive test for Cymbidium mosaic virus. In one group of 42 plants of named varieties, 35% were found to be virus-infected based on the samples taken. Infected plants may or may not show leaf symptoms of the virus disease (Fig. 1). It was not determined if any group of mericlones were completely free of the virus since a complete testing of all mericlones was not considered feasible.

Due to the wide distribution of Cymbidium mosaic virus in orchids, it is impractical to prevent the sale of virus-infected orchid plants. The buyer should purchase only mericlones known to be propagated from virus-free plants. There is no guarantee that mericlones produced from virus-infected orchid plants will be free of the virus. Orchid plants free of virus will produce mericlones free of virus.

Literature Cited

1. Bertsch, W. 1967. A new frontier; orchid propagation by meristem tissue culture. Amer. Orchid Soc. Bull. 36:32-38.
2. Morel, G. M. 1960. Producing virus-free cymbidiums. Amer. Orchid Soc. Bull. 29:495-497.